

# STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION  
Division of Aeronautics

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## BACKGROUND:

Colorado Division of Aeronautics Continuous Aviation Planning Program is authorized as the method for determining the scope of the State's present aviation system, modifications necessary to the present aviation system and forecasts of future requirements. An integral factor in that process is the condition of pavements at each of the state's system airports.

This project historically has involved conducting pavement condition index (PCI) surveys in accordance with Federal Aviation Administration's (FAA) Advisory Circular (AC) 150/5380-6. The collected information was stored in a Micro PAVER database. AutoCAD maps of the project airports were prepared, and ArcView GIS software was used to provide an interactive link between the Micro PAVER database and the AutoCAD maps. The Colorado Division of Aeronautics has divided the state system airports into three categories, major, intermediate, and minor.

## OVERVIEW:

The Colorado Division of Aeronautics will be utilizing grants from the Federal Aviation Administration (FAA) over the next five years to undertake and evaluation of airfield pavements using FAA AC150/5280-6: Guidelines and Procedures for Maintenance of Airport Pavements (latest edition). One table is inspected each year whereby each system airport will be inspected once every three years. Table I will be due during State fiscal year 2011.

## SCOPE OF WORK

### Element 1 – Pavement Condition Indexing

- a. The contractor will perform an evaluation of airfield pavement at airports identified in phases I, II, and III. Criteria for these evaluations will be as per FAA AC 150/5380-6: Guidelines and Procedures for Maintenance of Airport Pavements (latest edition). This work will be carried out under a contract between the Division of Aeronautics and a qualified consulting firm. The Division will provide a staff engineer to assist and accompany the consultant, as the Division warrants, to guarantee consistency with future year inspections and develop staff expertise.
- b. In addition to conducting visual inspections and evaluations of the airfield pavement surfaces, information on the types and severity of the pavement distresses will be recorded and entered into a pavement management system data base that operates in the Windows environment and provides an interactive link with the airport section maps, and can be linked to other related software and be put on view through the

Division's web site. The contractor will also provide the Division with the needed training to utilize the systems software.

## Element 2 – Reports

The contractor will be responsible for the preparation and submission of specific reports and data including, but not limited to, the following:

- a. Technical Memoranda – Prepare, for each of the inspected airports, reports and graphics indicating the condition and location of all sampled airside pavements on the airport. These memoranda will be useable to prepare and/or evaluate capital improvement plans for each facility by the Division.
- b. Data Base Computer Files – The Contractor will provide to the Division of Aeronautics all computer files associated with the pavement management inspections. These files will be prepared using pavement management software that operates in a Windows environment and provides the ability to link with other aviation software.
- c.
- d. Quarterly Progress Reports – The Contractor will provide quarterly progress reports to the Division of Aeronautics outlining major work elements accomplished, activities during the period and progress to date. These reports will serve as the basis from which payment requests will be evaluated and processed.

## Element 3 – Pavement Management System Requirements

- a. The system must operate in a Windows environment.
- b. The system should permit multiple condition evaluation methods that do not rely solely on the Pavement Condition Index (PCI).
- c. It should feature unlimited, user-specific and user-modified treatment alternatives, priority rankings, performance modeling and financial scenarios.
- d. It should feature an interactive interface between the data contained in the database and the analysis program with AutoCAD maps.
- e. The existing Micro-Paver database will be transformed to interact directly with any new Division Pavement or Information Management System.
- f. The PCI data base should correlate to the Colorado CIP.

As noted above, the Pavement Management System will be required to link to AutoCAD maps of each airport. This link will facilitate the retrieval and presentation of collected data. It should allow for “point and click” operation so that an individual section at a specific airport can be accessed to obtain inventory data, current and

predicted conditions, and 5-year CIP. This feature will be utilized to enhance the display of color PCI maps and other stored items.

**Goals:**

All components of the Continuous Aviation System Planning Proposal – Pavement Condition Indexing element and reports must be completed no later than twelve (12) months following the issuance of a Notice-to-Proceed from the Division of Aeronautics for the identified phase of work.

The Division will require reports in a format that can be displayed on the Division's web site. All reports, files and, documents will be provided to the Division for distribution.

All reports, files, and documents will be publicly identified as the property of Colorado Division of Aeronautics and will include the Division's Logo. Any published documents will acknowledge the use of Federal Airport Improvement (AIP) funds, note the required federal disclaimer(s) and identify the assigned AIP Project Number.

The successful firm(s) will be required to work in close collaboration with the staff of the Colorado Division of Aeronautics. Applicants need to display a sound understanding of the conceptual parameters of the Proposed as stated in the Scope of Work.

